SPECIAL FEATURES

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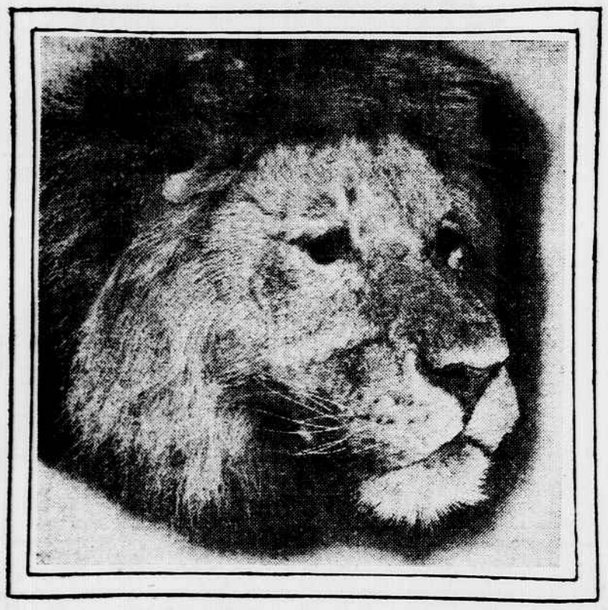
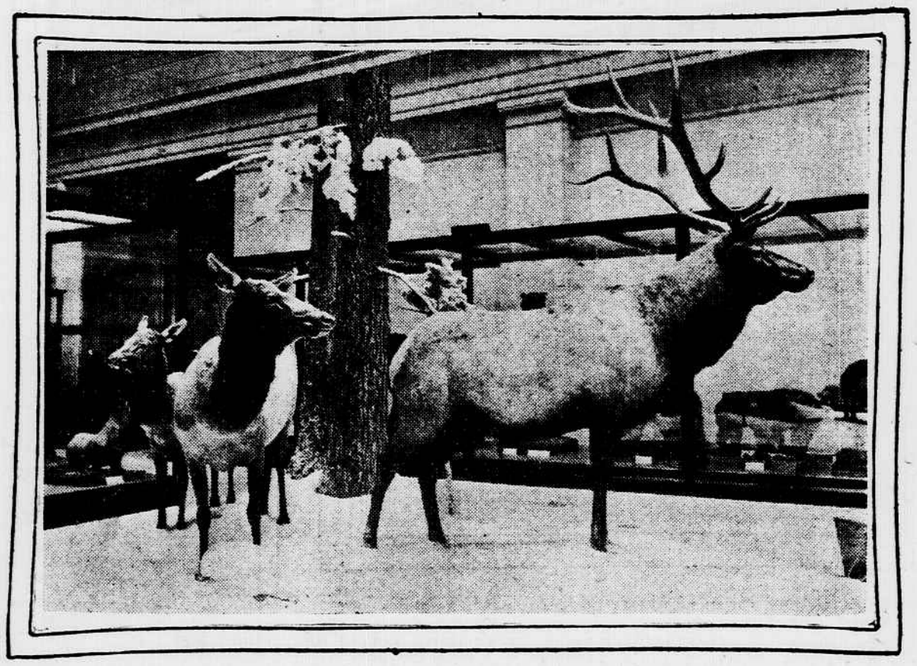
Remarkable Still-Life Menagerie of National Museum

NO Better Examples of Taxidermy Exist Than Those in Government's Big Museum. Elk Group Is the Latest Addition—The Roosevelt Animals—How the Taxidermist Goes About His Work—American Indians Preserved the Skins of Birds—The New School of Taxidermy Replaced the Old Idea of "Stuffing" Animals—Mounting the Big Groups for Exhibition.

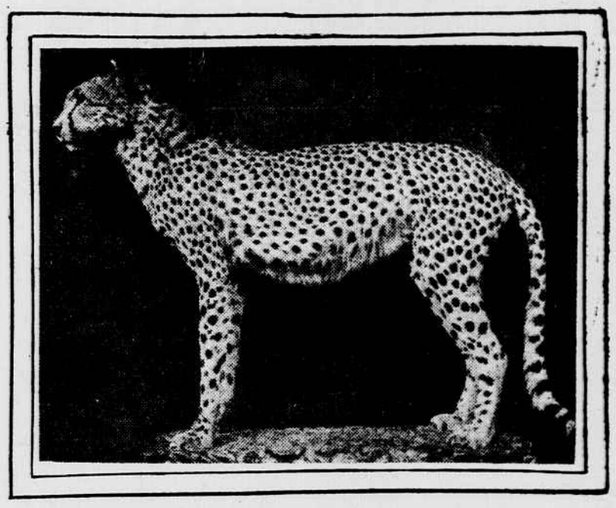


LION IN STILL-LIFE MENAGERIE OF NATIONAL MUSEUM.



ELK GROUP, THE LATEST ADDITION TO MUSEUM COLLECTION.

(All photographs by Dr. R. W. Shufeldt.)



AFRICAN CHEETAH KILLED BY KERMIT ROOSEVELT.

THE still-life menagerie of the National Museum has been augmented by a new family group of elk. Comprehensive as this animal exhibit is, a good specimen of American elk has not been included until now, but the new group more than makes up the deficiency. It presents one of the most illuminating illustrations of animal life that the museum owns. The authorities are unanimous in their verdict that it is one of the finest pieces of taxidermy in the huge mammal hall, which, by the way, can boast of some of the most excellently mounted specimens in the country.

The new elk group, not yet installed in its case, and, indeed, lacking a few finishing touches, as, for instance, the glittering surface on the snow-covered ground where the figures stand, represents a complete family in the Yellowstone Park at the first sign of winter.

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The dramatic poise of the animals is startling in its versimilitude, and the "scenic setting" of new-fallen snow and snow-laden trees gives an artistic contrast to the reddish brown skin of the animals that is not the least effective detail of the group. The time when these particular specimens are supposed to have been taken is the late fall, when the bulls are at their prime. At this time they are muscular, yet graceful.

The band in this group represents a bull with his mate and her spring calf. They are all in excellent condition, and have yet to attain the thick growth and fat which carry them through the winter, when shelter and food are difficult to find. Their attitude is attention. The bull is supposed to have heard a distant challenge in the timber, where they are wandering, and he has stopped suddenly. The cow is concerned at the bull's alarm, and is dividing her attention between the disturbance and her offspring. The calf, standing close to its mother, is apparently watching her before its makes its next move.

The vigor of the male, the keen alertness of the female and the calm dependency of the calf are reproduced with all the likelihood which the art in modern methods of taxidermy makes possible. This group was collected in October, 1914, and the design and execution are by James L. Clark of New York. From the date of collection to the present time is almost two years. This seems a long time to mount three elk, or, at least, so thinks the average museum visitor, but when one considers the vast amount of labor entailed in shooting down specimens and subsequently landing them as a mounted group, the opinion must change.

Few comprehend what a stupendous task the collection and installation of "big game" by a museum means. An intrepid hunter, with a retinue of carriers, native huntsmen and supplies, makes his way through the overgrown, snake-infected tropics; over the bitter-cold ice fields of the arctic region or into the almost impenetrable thicknesses of mountain forests, in order to bring new specimens of animals back to civilization for men to study and increase the knowledge of the earth beyond the limits of individual horizons.

But this tells only one-half of the story. Nor does it mean that somebody in the expedition shoots a beast and has a native rip off its skin, apply a preservative, roll it in a bundle and send it to a museum, where it is softened and stuffed, to be set up for school children and sightseers to gaze at and be thrilled by.

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No such haphazard methods are followed. On the contrary, the utmost scientific precision marks every step in the collection of animals for mounting. In no small measure does this contribute to the great difference which museum habitues are wont to remark distinguishes modern groups of mounted animals from the old-fashioned ones. One is aware after a trip through the mammal hall of any great museum that the new method is to reproduce nature. A taxidermist will take a family group of lions and show them feeding, sleeping or fighting, with muscles according to the laws of physiology and expressions fitting the activity. He is only satisfied with a faithful portrayal. The taxidermist of yesterday did not understand what a faithful portrayal meant.

What an expedition really does when it sets out to capture specimen game is carefully to observe the region where the animal lives and take notes and make photographs of the vegetation and topography. The camera man is also brought into service with his telescopic lens to obtain views of the animal in various attitudes in its natural setting. These are indispensable in the subsequent mounting of environmental and dramatic groups.

After an animal has been shot careful measurements are made of the body and complete notes taken on the exact color of the eyes, skin, hair, etc. Then the skin is sent to a museum. When it arrives it is promptly unpacked and from this time on most serious and important undertakings are involved before the animal is even set up. The skin must be tanned in a superior manner or it is apt to fade and lose its hair. The skeleton must be constructed and here the identification to original measurements and a great deal else of importance must be closely followed.

It is through adherence to such a program that scientific taxidermy has long since ceased to be a mere trade. It has, one might say, been graduated by modern methods into the realm of art. It requires a wider understanding and even a more delicate constructive ability to mount a lion or any other animal than to chisel the same animal from marble.

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A taxidermist—that is, a twentieth century taxidermist—aims to re-create an animal, to give it all that nature endowed it with, except the vital spark. And to aid him in such accomplishments he must be biologist, anatomist, artist, sculptor and all-around mechanic. Rarely, it is obvious, can all these be found in one man; however, fine realistic groups are being mounted which are called composites. They represent the combined labors of taxidermist, modeler, designer and artist.

It is out of the question to enumerate all the fine groups which are to be found in the museum. The moose group, mounted in the most perfect surroundings of their natural habitat, is perhaps the finest series of this animal in this, or any other, country. This group, before the acquisition of the new elk group, was about the only thing of its kind in the museum. There are, however, a number of notable single deer. Among the kin of this group of animals are a few fine pieces of the antelope group.

Two of these were shot by Kermit Roosevelt when he accompanied his father on the memorable game hunt in Africa. The klipspringer has had very little published about it, though it is one of the most interesting of the many species of antelope which abound in Africa. These animals have a peculiar habit of standing upon the point of their hoofs, after the manner of a ballet dancer on her toes. The gerenuk is another slender-necked, gazelle-like antelope, which Kermit Roosevelt also killed.

The case which contains several specimens of the nearly extinct bison, or American buffalo, is considered a triumph in the preservation of ponderous mammals. They are all true to life, preserved by all the most efficient methods of taxidermy, and, what is not generally known, the very sod upon which these animals stand was brought from Montana, being shipped from the buffalo ranges of that territory for the purpose. This applies also to the sagebrush, which appears to be actually growing within the case, and the broom sedge and the cacti. The skulls and other bones of the buffalo lying about were gathered in the same place. As a whole the group is a strip of Montana prairie unfolded in the case just as it appeared in nature. Even the tracks seen about the pool of water were made by using a real buffalo's hoof for the stamp to make the impressions.

The museum contains a group of African buffalo, shot by Col. Roosevelt. Like the native group, it is mounted amid natural surroundings in a striking manner. It forms one of the impressive groups of Roosevelt animals which have enlarged the museum collection.

It is, perhaps, difficult to make a choice among these groups. The hippotamus case is extraordinarily striking for the reason that the climax of the taxidermist's ambition is reached when he can mount a hairless animal in a way that is at once a perfect reproduction of the original and will keep indefinitely uninjured by the ordinary ravages of time.

Of this kind of work the museum has several notable examples in addition to the "hippos." Elephants fall into this class, as do rhinoceroses. The chief factor in the success of mounting these animals is that the skin is laid over a thick coat of clay, which is molded over the frame or mannikin. Through this ingenious device, after the skin is on and the taxidermist begins to model the form to copy the live animal, it is comparatively simple to reproduce all the wrinkles, depressions, lines and protuberances by working them on the skin through the agency of the yielding clay beneath it.

Lions are among the most difficult animals to mount, and endow with life-like expression. This is always the case with forms belonging to the higher groups. For this reason also they offer the finest opportunities for the development of muscular anatomy, and the expression of the various higher passions. The Roosevelt lion group is considered excellent in this matter of expression, and has not a peer for this species in any other museum in the country.

One can have little conception of the skill displayed in the mounting of this group. The superb condition of the fur and the expression in the region of the mouth parts, which lends facial animation, are testimonials to the infinite patience which was put into this work. To make an animal grin or lend to the eyes a flash of sullen anger is an accomplishment that demands of the artist knowledge, skill and above all superior judgment.

Tigers are in the same class with lions as far as difficulty in mounting is concerned. To skin a tiger's tongue and preserve it so as to make it look like the original in the living subject; to clean the teeth and blend the black parts of the lips with the pink gums inside, all these things require time and superlative skill. But the museum has certain specimens of this sort which prove that such feats are not impossible.

A specimen of well mounted leopard is the cheetah, which, because it can beat any animal in Africa on a short spurt, is not always taken with ease. This particular cheetah was killed by Kermit Roosevelt.

Few persons realize that many American animals are being swept away forever. The museum has been careful to preserve in its best manner a number of them. The walrus, for instance, has received close attention, and the excellent mounted figure of this colossal animal will doubtless before another century rolls by excite great interest among the people as a relic of a dim past age.

Some of the seals and other marine animals are very fine. They, too, scientists say, will soon be exterminated. This is also true of the bears, but none more so than the polar bear. The museum has a very fine mounted specimen of polar bear. The ice on which this bear rests is wonderfully well counterfeited by using a coat of paraffin over sheet glass. The proper effect is gained through its transparency.

What knowledge one has of habits, ranges and specific differences in respect to the animals of the world is obviously increased by such museum exhibits as these which Washington has access to. That it is thought some of the animal are vitally interesting enough to spend from $1,000 to $5,000 to mount them—for these large mammals have not been mounted in their present cases for a cent less—indicates that as pictorial aids to education they are considered of immense value.

That the art of taxidermy has been brought to its present stage of artistic development is also an indication that museum curators believe a group of animals not mounted in an instructive, scientific and artistic manner utterly fail of their purpose of exhibition. That there has been an evolution, a progressive advancement in taxidermy, shows the insistent demand for "true to nature" specimens.

What the art has passed through to attain this development is extremely interesting, for taxidermy, like every other profession, was nursed in the cradle of crude beginnings far back in history. It came into being with such pristine pursuits as prehistoric tanning, the embalming of the human body and those of certain animals found in antique remains in Egypt. A very ancient Carthaginian explorer left in his record of African explorations an account of the discovery of the gorilla and mentioned having killed any flayed them and conveyed their skins to Carthage.

The American Pueblo Indians make very good flat skins of small birds today, an art which can no doubt be traced to the Mexicans, who have probably practised it for ages. Montezuma, reported Cortez, possessed robes covered with skins of brilliantly plumaged birds of Mexico.

From the making of these flat skins for personal adornment it is easy to conceive that the desire to preserve similar forms in their natural appearance ordinarily followed. Gradually people began to ornament their homes with stuffed birds and small animals and a demand arose for that kind of work, and it fell to the hands of those who were most skilled. These were the first taxidermists.

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Now, although the mere preserving of skins of animals is an operation that can be traced back through nearly all races of people to the dawn of history, this does not altogether hold true of the mounted animals. Probably the oldest museum specimen in existence is a rhinoceros, still preserved in the Royal Museum in Florence, Italy. It dates from the sixteenth century.

Little seems to be known of the beginnings of the practice of the "stuffing" or "setting up" of animals for ornamental or scientific purposes. It is highly probable, from what can be gathered from old works of travel and natural history, that the art is not more than 300 years old. It was practiced in England toward the end of the seventeenth century, and some of these early specimens are still preserved at the museum of South Kensington, England.

It was not until the middle of the eighteenth century that any written matter devoted to the principles of the art was published. Reamuer's treatise was probably the first. France and Germany led in the production of clever taxidermists. Among early examples of this comparatively new art, with which everyone is now familiar, are those produced under the patronage of the famous naturalist, Prince Maximillian of Nieu Wied, Germany. He spent several years in exploring the bird regions of North and South America and always took a taxidermist with him on his expeditions. The American Museum of Natural History is the possessor of the entire set of natural objects which formed this pioneer naturalist's collection, the representations of the earliest period of the art.

Taxidermy from that time on seems to have passed through a stage of development when it was termed a very ignoble pursuit, unworthy of the efforts of educated men. In fact, the idea seemed to be to surround the art with as much mystery as possible and conceal its methods from the eyes of the public.

Through the education of the youthful followers of the art in the early nineteenth century taxidermy emerged from its state of opprobrium and developed to a point where it turned out some of the stiffly posed, unnatural specimens of mounted birds and beasts that the present generation still remembers as the adornments of the early museums in this country.

Now a new school of taxidermy is in vogue, a school with new methods which practically discards all old processes of "stuffing" in favor of the more artistic modeling. After the skin of an animal has been completely removed a copy is made of the body, posed as in life, and from this an accurate representation of form is built up in light materials. This model is then covered with the skin, which is damped and pinned in to follow every depression and prominence. When the model is dry the finishing touches are added. These usually consist of the tongue, eyes and lips. The eyes are not reproduced in glass, this material being considered too unnatural. They are fashioned from hollow globes and are hand painted from nature to convey the exact impression which the pose of the body demands.

The new system of work is definitely exemplified in the lately mounted groups which show the specimens surrounded by exquisitely modeled foliage and shrubbery of the nature of their individual environments. As types of what the new art has accomplished, no better examples exist in the United States than those in the National Museum.